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FEBRUARY 2010



# The Dewpoint

THEME: STUDENT ACTIVITIES AND UCF INITIATIVE MONTH

Another great showing for the Central Florida Chapter at the ASHRAE Winter Meeting here in our own back yard! Mr. Bill Dillard led a great team of host committee members and volunteers that helped to make the Winter Meeting a spectacular event. We thank you, Bill, for all your efforts and for helping to pave the way for the next generation of host committee members. I'd also like to thank all of the employers that understand how important it is to give back to ASHRAE. Without your support, this organization would not be where it is today. The Central Florida Chapter recruited over 150 volunteers, volunteers that took time out of their busy lives to help our Chapter and our Society. I'm very humbled and proud to be a part of such an awesome chapter.

## PRESIDENT'S MESSAGE

Rich King, PE



Volunteering for the Winter Meeting wasn't all hard work, though. We had some fun too! Our very own past president, Mike Dillard, organized and emceed a Wii tournament featuring Society's executive committee. It may be the only time in history that vice presidents punched each other, knocked each other out and had an audience to cheer them on. We also hosted a hurricane party with over 600 attendees! The hurricane was so strong that it actually removed all of the decorations from the room.



ASHRAE President Gordon Holness, PE with the 2010 Winter Meeting Host Committee from Central Florida

Now that the international conference is in the past, it is time to refocus on our chapter. We still have many, many events coming and somehow we even twisted Gordon Holness's arm to come back to Central Florida and present his presidential message, "Sustaining our Future by Rebuilding Our Past". We're honored to have President Holness back in Orlando and look forward to this exciting meeting.

Have you gotten your dodgeball team together? There is nothing better than getting a bunch of engineers, contractors and manufacturers' reps. together for some good YEA type fun. You can be guaranteed that one team will over analyze everything, another will tell you how they could've done it better and the last will tell you why theirs is better than all the others. So grab your balls and get your team together!

Not too long after the Dodgeball Tournament, we will be having our 8<sup>th</sup> Annual Shrimp Boil. We return to the Winter Park Farmers' Market on Thursday, March 25<sup>th</sup> for more shrimp, drinks and good times! More information will be out soon.

See you on February 9<sup>th</sup>!

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[www.ashrae-cfl.org](http://www.ashrae-cfl.org)

ASHRAE Society Website: [www.ashrae.org](http://www.ashrae.org)

## Programs

What a wonderful turnout! I would like to thank the staff at Dubsread for a wonderful job accommodating our increasing dinner meeting attendance. I also would like to thank every one of you who made it a point to attend.

ASHRAE Distinguished Lecturer, Marlene Linders delivered on much more than just great attendance. Besides having a very impressive bio and presentation, we are proud to say that Marlene calls Central Florida home. She lives in Winter Park, FL and has her own practice in Heathrow, FL.

Marlene started her presentation asking attendees to shed their engineer hats and wear the hat of VP of a major hospital group. Infection control is directly affecting your bottom line and you are completely responsible for the losses and liabilities of which stems from it. The statistics she presented were equally alarming – 100,000 deaths annually in the US alone. Marlene noted that hospital construction was responsible for 10% of these mortalities i.e. 10,000 people going into the hospital and possibly never leaving alive. The human toll was definitely an eye opener. Due to copyright issues, Marlene's presentation will not be available on our chapter website. You can however contact her office at *Philders Group International Inc.* to get in touch with Marlene.

Micheal Sheerin led the YEA members into the YEA Tech topic and our membership promotion chair, Amy Pastor gave us an insight into ASHRAE membership. We would also like to thank the members of ASHE and ACHA who were in attendance.

This brings me to the all important next month's meeting!

**President Gordon Holness, ASHRAE President 2009-2010 is our keynote speaker.** He will be talking to the chapter about his presidential theme – *Sustaining our future by rebuilding our past.* The meeting will be a joint meeting with the ASHRAE's Spacecoast chapter. We expect a good turnout. Our sister organizations (BOMA, IFMA, USGBC, AIA etc.) will also be sending their representatives.

It would bring us great joy to see our members attend. The ASHRAE President visiting the chapter has been a tradition now for the last few years. I have seen our President deliver a speech on this theme and want to assure you that you will leave smarter and wiser. Gordon draws from over 45 years of technical and management experience, over 25 years of ASHRAE experience, and a personal and international work/travel experience few others can match. The statistics he presents are factual and his vision for our professional society is inspirational.

I hope I have sparked your interest. Hope to see you at the meeting.

Important Note – The meeting day (February 9<sup>th</sup>, 2010) is a Tuesday and NOT the usual second Thursday. Kindly make a special note in your calendars.

Chair:  
Jason Alphonso, PE



## Upcoming Events

**Sustaining Our Future by  
Rebuilding Our Past**

**February 9, 2010**

**Gordon Holness, P.E.,  
Society President**

**Joint Meeting with BOMA/IFMA**

**First Annual Dodgeball Tournament**

**February 27, 2010**

**Frontline Outreach Center**

**Central Florida Shrimp Boil**

**March 25, 2010**

**Winter Park Farmer's Market**

**Master Format 2004**

**April 8, 2010**

**Charles E. Gulledge, III, P.E.  
Joint Meeting with SWE/ASME**

**Spring Golf Tournament**

**April 9, 2010**

**Sanctuary Ridge Golf Course**

**UCF Energy Symposium**

**April 16, 2010**

**Student Union, Main Campus**

**ASPE-ASHRAE Product Show**

**May 11, 2010**

**Central Florida Fairgrounds**

**Ice Fog and Psychrometrics: The Missing Link in Industrial Freezer Design**

**May 13, 2010**

**S.A. Sherif, PhD**

**Joint Meeting with AEE**

**2010 Region XII CRC**

**August 19-21, 2010**

**Rosen Centre Hotel**

## 2010 Region XII CRC

With the Winter Meeting now over, the Central Florida Chapter is shifting its focus to the 2010 Region XII CRC. We are hosting Region XII in Orlando so that we can continue "Sustaining the Momentum" of Society's message that our Region has built over the last few years. We are proud to welcome our Region XII friends and ASHRAE Society dignitaries to Orlando once more in 2010. Please join us August 19<sup>th</sup>, 20<sup>th</sup> and 21<sup>st</sup> for the 2010 Region XII Chapter Regional Conference.

The venue is the beautiful Rosen Centre Hotel on International Drive. CRC registration, schedule (which has been modified to end earlier on Saturday) and sponsorship information is online at [www.crc2010region12.org](http://www.crc2010region12.org). Information on hotel room registration for the Rosen Centre is included as well.

We're looking forward to another fantastic Region XII CRC and another opportunity to meet, share ideas, build on our efforts to create a more sustainable world, and further Society's expansion and message.



*What are you  
doing April 9th?*

## Chapter Technology Transfer Committee

By the time this article is published another ASHRAE conference will be behind us. I hope many of you were able to attend the show and take in some of the technical sessions and events. Overall, the Orlando host committee did an excellent job and we thank them for their dedicated efforts and valuable time.



Chair:  
John Davant

This month's Dewpoint articles focus on ASHRAE 189.1 and a discussion on water cooled chillers. The purpose of ASHRAE Standard 189.1 is to provide the minimum design requirements for high performance green buildings excluding low rise residential buildings. Cameron discusses some differences between open and hermetic drive water cooled chillers. Be sure to catch both these articles.

### Technology Awards

ASHRAE technology awards recognize successful applications of innovative design which incorporate ASHRAE standards for effective energy management, indoor air quality and good mechanical design. The purpose is to recognize members who design and conceive innovative technological concepts that are proven through actual operation.

This is our opportunity to show this industry what we have accomplished and show off our innovative approach. If you have a project you would like to highlight please email me and I will follow up with you for the details of the project. Be sure to email me at [john.s.davant@jci.com](mailto:john.s.davant@jci.com) or phone me at 407-212-1293. I will be following up in the next couple of weeks in order to submit some of our projects.

## Technical Activities

Co-Chair:  
John Fabian



## Refrigeration

Chair:  
Cameron Sherwood



### Water Cooled Chillers - Open or Hermetic Drive

There are two options for motors for water cooled chillers, Open Drive and Hermetic Drive. An open drive has an electric motor that is air cooled by the ambient air. A hermetic drive has an electric motor that is hermetically sealed and cooled with refrigerant. With having experience repairing and maintaining both open drive and hermetic drive machines, each arrangement has its advantages and disadvantages.

Open drive water cooled chillers have the possibility to be driven by other means such as steam turbine, gas motor, or gas turbine, etc. These machines can be converted to alternative refrigerants; the motors do not rely on refrigerant for cooling. Open drive electrical motors can have electrical power diversity, capable of handling high voltages, which will reduce a facilities transformer needs. The electrical motor will have more windings, though, due to higher operating temperatures thus adding motor heat to the space. Repairs can be made to the electrical motor since the motor is accessible. There is a mechanical seal for the compressor shaft that connects to the motor shaft, this mechanical seal will leak in due time. This, as we have all experienced, is in line with the old quote, "More moving parts and more points of connections creates the possibility of more probable failures in time."

Hermetic drive chillers have electrical motors that are cooled with refrigerant; this allows for reduced motor winding and minimal heat dissipated to the space. The electrical motor heat will be transferred from the refrigerant to the condenser water. Hermetic drive chillers do not have shaft coupling of the motor to the compressor or mechanical seal, which creates a lesser chance for failure. These chillers have placement versatility, i.e. they can be placed outdoors, because the motor is sealed and not cooled by ambient temperatures.

### The New ASHRAE Standard 189.1-2009

Standard 189.1 was written in conjunction with the U.S. Green Building Council (USGBC) and Illuminating Engineering Society (IES). Its purpose is to create a standard that provides the minimum requirements for sustainable or green buildings. This Standard applies to all building types excluding low-rise residential, similar to Standard 90.1. Although one of the goals of Standard 189.1 is to reduce building energy consumption over Standard 90.1-2007, the Standard addresses other aspects such as site sustainability, water efficiency, occupant comfort, environmental impact, materials and resources. This Standard is not a rating system but instead written such that it may be adopted by organizations like government, universities or corporations. It is also hoped to be integrated into green building rating systems and serve as a prerequisite or compliance requirement, such as the ASHRAE Advanced Energy Design Guides (AEDG). For more information, visit <http://www.ashrae.org/greenstandard>.

*Looking for a way to donate to ASHRAE Research?*



## Student Activities

Chair:  
Anik Patel



Co-Chair:  
Kellie Watson



The UCF students had the opportunity to attend the 2010 Winter Conference last week. They kicked off the week with the Student Breakfast followed by the Student Program on Sunday morning. They were first welcomed by ASHRAE President Gordon Holness. Awards were then presented to the 2009 Student Competition winners. Brandi Lewis represented the 2008-2009 UCF System Design Team and accepted their third place award. The students were then given tips on “How to Sell Yourself in a Down Economy” and Dale Carnegie strategies were used to get the students out of their seats and interacting with each other as a way to practice interview and communication skills. Lastly, a career panel consisting of a variety of industry professionals, including our very own Rich King, was available to answer the student’s questions about job hunting, work ethic and the industry in general. UCF student, Larry Stoff found this open discussion the most useful, “I got a really good idea of what the industry is like now, how to approach getting a job in this economy, and what employers are looking for. I feel that I am now more equipped to proceed in seeking employment in the HVAC industry.”



That afternoon, the students had the opportunity to tour the site of the 2010 Student Design Competition project, Florida Hospital Ginsburg Tower. They were led by TLC’s Mark Costello through the building’s central energy plant and got a better idea of the layout of the facility and size of mechanical systems.

Due to the huge success of the OCPS Teach-In Day last semester, we will be teaming up with USGBC’s Robyn Dowsey to put on another Teach-In day event at a Lake County Elementary School. This event will focus on Sustainability, teaching

the children about global warming and conservation strategies. We plan on visiting first and second graders at the end of the month. If you are interested in helping, email [ashrae.sa@gmail.com](mailto:ashrae.sa@gmail.com).



## Research Promotion

Chair:  
John Miller, PE



After the tough times we all have experienced over the past year with the economic downturn and the tightening of the preverbal corporate belts I am pleased to say that the ASHRAE Central Florida chapter continues to flourish. To date our chapter members through personal donations and/or their participation in ASHRAE Research fundraising activities have contributed \$13,940 to this year's campaign! This outstanding progress has us currently at 42.3% of our goal for the year (over \$2,700 more than this time last year!).

For those of you who still have yet to contribute to this year's campaign, there is still plenty of time and plenty of ways for you to get involved. The easiest way to contribute is to sign up for the upcoming Spring Golf outing. Registration for this event has started and all entries are due by April 1<sup>st</sup>. Please contact Firouz Keikavousi ([firouzk@gmail.com](mailto:firouzk@gmail.com)), Megan Tosh ([mtosh@stanweaver.com](mailto:mtosh@stanweaver.com)) or myself ([john.miller@peifla.com](mailto:john.miller@peifla.com)) for more information. Attached to this month's Dewpoint is a registration sheet that you can fill out to reserve your spot today!

Of course, contributions can still be made directly to research by check, made out to ASHRAE Research and presented to any board member to forward to society. Contributions can also be made online at ASHRAE's website, <http://www.ashrae.org/contribute>. If making your donation online, please reference the Central Florida Chapter where prompted.

Thank you again Central Florida for your support!

## UCF Initiative

Chair:  
Kyle Davis



Great things continue to happen with UCF and ASHRAE and it is time to update our Central Florida ASHRAE community.

Last year, our student teams that competed in the ASHRAE Student Design Competition, participated in the first annual UCF Energy Symposium sponsored by Progress Energy. This is a one day event that allows the senior design teams to show their energy related projects and give a brief presentation to the local community leaders and UCF staff. Projects last year consisted of everything from making bio-fuel, better controls on traffic lights, solar hot water storage, and the designs from our students for the ASHRAE competition.

This year's Energy Symposium will be held on April 14 in the Student Union building on UCF's main campus. We have three teams competing in the ASHRAE Student Competition so please feel free to stop by and see our students present. I have had the opportunity to catch a glimpse of our student's projects and I am very excited about what they are coming up with. As an added bonus, the building the student teams are working on for this year's competition is none other than the new Ginsburg Tower at Florida Hospital's main campus. Keep in mind that teams from all over the world are working on the same building and, in my opinion, it is nice to have the global community of ASHRAE students focusing on our local community.

We have other items in the works and we will continue to keep you all posted in future issues. One other item, we have several very bright and talented students in our UCF student chapter. If any of you are looking for some interns, please let us know; you won't be disappointed.

## Chapter Past Presidents

James A. Oberlin	1962-63
James A. Driver	1963-64
Warren L. Chase	1964-65
Kenneth E. Hayes	1965-66
Lloyd H. Boissoneault	1966-67
William C. Denson, PE	1967-68
Maynard D. Reese	1968-69
William R. Penn	1969-70
Theodore H. Brooks	1970-71
J. Wesley Floreth	1971-72
Wiley M. Cauthen	1972-73
Edwin C. Pratt	1973-74
Lyle M. Houser, Jr, PE	1974-75
Hal A. Head, PE	1975-76
Garth E. Tristram	1976-77
Raymond E. Davis	1977-78
W. Hugh Wilson, Jr	1978-79
William M. Dillard	1979-80
John D. Simmonds, PE	1980-81
Joseph K. McCarthy	1981-82
Dwayne Lorenze	1982-83
David Wassman, PE	1983-84
David Krause	1984-85
Bill Watford	1985-86
John J. Asendorf, PE	1986-87
Melvin Borczynski	1987-88
Jack Zelsman	1988-89
Kenneth L. Eiermann, PE	1989-90
Kevin K. McKenzie, PE	1990-91
Todd S. Morgan, PE	1991-92
Firouz Keikavousi	1992-93
John Elsea	1993-94
Bernard Horne	1994-95
Mark Lanier	1995-96
Larry Snyder	1996-97
Bill Leaton	1997-98
Hossein Dayi, PE	1998-99
Gary Carver, PE	1999-00
Michael Sheerin, PE	2000-01
Traci Just	2001-02
Chris Bradford	2002-03
Dan Cross, PE	2003-04
Damon Lynn, PE	2004-05
Todd Moore, PE	2005-06
Tim Citek	2006-07
Mike Dillard	2007-08
Wade Conlan, PE	2008-09
Rich King, PE	2009-



*Need a break from the office?*

# ASHRAE Jobs is Society's Online Employment Resource

With an exceptionally difficult recruitment market, the ASHRAE Jobs Career Center has been averaging 55 active job postings per month and just over 5,000 monthly job seeking visitors. Recruiters are experiencing, on average, 12 online applications per job posting and have access to just over 1200 resumes that have posted its launch on June 15.

ASHRAE Jobs is not only about the hire. It is the path to a hire. By visiting [www.ashraejobs.com](http://www.ashraejobs.com), you can search for certain skill sets and demographics that you are "always looking for". It is the place to capture high performers you can use to replace underperformers. Is this the place to see if your competitors people are out searching and interested in you. It is also the place to capture candidates for your Q1 hires because we are only 45 days away.

ASHRAE Jobs understands you do not want to be sold to. But you still have opportunities and problems, and may need a professional to discuss those with. That is what you can expect from ASHRAE Jobs: a no-strings-attached conversation where a representative listens and then makes recommendations whether they include ASHRAE Jobs or not. For more information, visit [www.ashraejobs.com](http://www.ashraejobs.com), call 888-482-2562 or e-mail John VonHarz at [jvonharz@ashraejobs.com](mailto:jvonharz@ashraejobs.com). An ASHRAE Jobs representative is available during business hours to discuss your firm's needs and make recommendations on next steps.

## Golf Tournament

Chair:  
Firouz  
Keikavousi



Our Spring Golf Tournament is coming up on Friday, April 9th at Sanctuary Ridge. Registration information can be found on our website at [www.ashrae-cfl.org/events/spring-golf-tournament/](http://www.ashrae-cfl.org/events/spring-golf-tournament/).

There will be one afternoon flight, with a shotgun start at 1pm. Lunch and dinner will be served for all golfers. Drinks will be available on the golf course, including margaritas!

All proceeds from the golf tournament go towards ASHRAE Research Promotion.

Thank you Central Florida for your support! We hope to make this golf tournament a huge success.



Come Join Us!!

## Chapter Leadership



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